CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-20-XXXX

FOR

HARRIS FARMS, INC. DBA HARRIS RANCH
HARRIS RANCH INN AND RESTAURANT WWTF
FRESNO COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and establishes monitoring and reporting requirements for the Harris Ranch Inn and Restaurant Wastewater Treatment Facility. Harris Farms, Inc. dba Harris Ranch (Discharger) shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges, and groundwater. Changes to sample location(s) shall be established with concurrence of Central Valley Water Board staff, and a description of the revised station(s) shall be submitted for approval by the Executive Officer prior to use.

The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991 (Standard Provisions). Field test instruments (such as those used to measure pH, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated at the manufacturer's recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA);
- *Test Methods for Evaluating Solid Waste* (EPA);
- *Methods for Chemical Analysis of Water and Wastes* (EPA);
- *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA);
- *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); *and*
- *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125).

Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than concentrations that implement applicable water quality objectives or limits for the constituents to be analyzed.

If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least eight (8) consecutive monitoring events, the Discharger may request the MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for the requested reduction in monitoring frequency.

A glossary of terms used in this MRP is included on the last page.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order.

Table 1 Monitoring locations: name and description

Name	Description
SPL-001	Point where a representative sample of the Discharger's source water (treated from the Coalinga Canal) can be obtained.
INF-001	Process point where a representative sample of the WWTF influent can be obtained prior to any treatment process.
EFF-001, EFF-002	Process points where a representative sample of the WWTF effluent can be obtained prior to discharge to evaporation / percolation ponds.
PND-005, PND-006, PND-002, PND-003	Evaporation / percolation ponds ("storage" ponds that contain effluent while it percolates and evaporates away)

SOURCE WATER MONITORING

The Discharger shall collect source water samples at SPL-001, upstream of any facility users. Time of collection of the grab sample shall be recorded. If the source water is from more than one actual location, the results shall be presented as a flow-weighted average of all source water locations. Source water monitoring shall include at least the following:

Table 2 Source water monitoring parameters and frequencies.

Parameter	Units	Sample Type	Frequency
Electrical conductivity (EC)	µmhos/cm	grab	Quarterly
Standard minerals	mg/L	grab	Once every three years

Starting in 2018 under the previous MRP, samples for standard (general) minerals were to be collected once every three years, so the next standard minerals sampling shall be in 2021 and every three years thereafter. Standard mineral analysis shall include:

Alkalinity, bicarbonate, and carbonate as calcium carbonate ($CaCO_3$)
Boron
Calcium
Chloride
Iron
Manganese
Magnesium
Potassium
Sodium
Sulfate
Total Dissolved Solids (TDS)

INFLUENT MONITORING

The Discharger shall collect influent samples at INF-001, situated at the headworks of the wastewater treatment facility, prior to any treatment of waste. Composite period of the sample shall be recorded. Influent monitoring shall include at least the following, as listed in Table 3.

Table 3 Influent monitoring parameters and frequencies

Parameter	Units	Sample Type	Frequency
Flow rate	mgd	meter reading	Daily
pH	standard units	grab (composite)	Weekly
Electrical conductivity (EC)	µmhos/cm	grab (composite)	Weekly
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	grab (composite)	Monthly
Nitrate as nitrogen	mg/L	grab (composite)	Monthly
Total Kjeldahl nitrogen (TKN)	mg/L	grab (composite)	Monthly

EFFLUENT MONITORING

The Discharger shall collect effluent samples at EFF-001 and EFF-002, situated at the outlet of each Secondary aeration pond, in the discharge lines to the percolation / evaporation (“storage”) ponds. Grab samples collected from a pipeline will be considered representative. Effluent monitoring is only required during periods when wastewater is discharged to the storage pond(s). If no wastewater was discharged to storage ponds, the corresponding monitoring report shall so state. Time of the grab sample shall be recorded. Effluent monitoring shall include at least the following, where “total nitrogen” shall include the sum of results for nitrate and ammonia nitrogen and Total Kjeldahl Nitrogen.

Table 4 Effluent monitoring parameters and frequencies.

Parameter	Units	Sample Type	Frequency
pH	standard units	grab (composite)	Weekly
EC	µmhos/cm	grab (composite)	Weekly
BOD_5	mg/L	grab (composite)	Monthly
Nitrate as nitrogen	mg/L	grab (composite)	Monthly
TKN	mg/L	grab (composite)	Monthly
Ammonia as nitrogen	mg/L	grab (composite)	Monthly
Total nitrogen	mg/L	calculation	Monthly
Total Suspended Solids (TSS)	mg/L	grab (composite)	Monthly
Total Dissolved Solids (TDS)	mg/L	grab (composite)	Monthly

POND MONITORING

A permanent marker (e.g. staff gauge) shall be placed in all WWTF treatment and storage (evaporation / percolation) ponds. The markers shall have calibrations indicating water level at the design capacity and available operational freeboard depth.

Storage pond monitoring at locations PND-005, PND-006, PND-002, and PND-003 shall be performed on any pond containing water more than one foot deep. If any pond is dry, the monitoring report shall so state. If any pond is not dry but has a wastewater level of less than one foot then no sample shall be taken, and the reason shall be noted in the sampling log. The time of collection of a grab sample shall be recorded. Freeboard shall be measured vertically from the water surface to the lowest elevation of pond berm (or spillway/overflow pipe invert), and shall be measured to the nearest 0.1 feet. Storage pond monitoring shall include at least the following:

Table 5 Storage pond monitoring parameters and frequencies.

Parameter	Units	Sample Type	Frequency
Freeboard	feet (to 0.1 ft)	measurement	Weekly
Dissolved Oxygen (DO) [note 1]	mg/L	grab	Weekly
EC	µmhos/cm	grab	Monthly
Pond conditions	*none*	observation	Monthly

note 1. DO shall be measured between 7:00 a.m. and 9:00 a.m. and shall be taken opposite the pond inlet at a depth of approximately one foot.

Should the DO be below 1.0 mg/L during a weekly sampling event, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected pond until the minimum DO concentration is achieved for at least three consecutive days. If the DO in any single pond is below 1.0 mg/L for three consecutive days, the Discharger shall report the findings to the Regional Water Board in accordance with General Reporting Requirement B.1 of the Standard Provisions and Reporting Requirements. The written notification shall include a specific plan to resolve the low DO results within 30 days of the first date of violation.

The Discharger shall inspect the condition of the ponds monthly while wastewater is in the ponds and record visual observations in a bound logbook. Pond conditions notations shall include observations of whether weeds are developing in the water or along the bank, and their location(s); whether grease, algae, vegetation, scum, or debris are accumulating on the pond surface, and their location(s); whether burrowing animals or insects are present; whether odors are present; and color of the water (e.g., dark green, black, dull green, brown, etc.). A summary of the entries made in the log shall be included in the subsequent monitoring report.

REPORTING

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence shall be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: CentralValleyFresno@waterboards.ca.gov

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
1685 “E” Street
Fresno, CA 93706-2007

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

Program: Non-15
WDID: 5D100117001
Facility: Harris Ranch Inn & Restaurant WWTF
Order: R5-2020-XXXX

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Central Valley Water Board in the next scheduled monitoring report.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

Laboratory reports submitted in compliance with this MRP shall be accompanied by a MS Excel file or equivalent that includes the analytical data found in the laboratory report. MS Excel files or equivalents must be generated by the laboratory or compiled by the Discharger. At a minimum, the file shall include the constituent name, sample location, sample name, sample date, analysis date, analytical method, dilution factor, result, units, and method detection limit (MDL). Electronic files shall either be mailed to the Central Valley Water Board Office on an electronic storage device or sent via electronic mail to CentralValleyFresno@waterboards.ca.gov. Either method of delivery shall include, at a minimum, a copy of the transmittal letter.

In addition to the details specified in Standard Provision C.3, monitoring information shall include the MDL and the reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. Quarterly Monitoring Reports

All monitoring results shall be reported in **Quarterly Monitoring Reports** which are due by the 1st day of the second month after the calendar quarter. Therefore, monitoring reports are due as follows:

First Quarter Monitoring Report (January – March):	**1 May**
Second Quarter Monitoring Report (April – June):	**1 August**
Third Quarter Monitoring Report (July – September:	**1 November**
Fourth Quarter Monitoring Report (October – December):	**1 February**

At a minimum, the report shall include:

1. Results of Influent Monitoring, including calculated values for total flow and average daily flow for each month, and total annual flow to date.
2. Results of Effluent Monitoring, including calculated percent change in BOD and total nitrogen.
3. Results of Pond Monitoring for the quarter.
4. Results of Source Water (water supply) monitoring for the reported quarter.

5. A comparison of monitoring data to the flow limitations, effluent limitations, and discharge specifications and an explanation of any violation of those requirements;
6. A summary of the notations made in the pond monitoring log during the quarter, including copies of inspection log page(s).

B. Annual Monitoring Reports

An Annual Report shall be submitted by **1 February** of each year. It shall include the following in addition to the fourth quarter monitoring report items listed above.

Influent Monitoring

1. Total annual influent flow, average monthly flows for each month of the year, and the average dry weather flow compared to the flow limits in these WDRs

Sludge Monitoring

2. Annual production totals in dry tons or cubic yards, with units clearly noted.
3. Effective 2020, and every five years thereafter, a written evaluation of sludge depth for each pond and sludge removal plans pursuant to Discharge Specification C.14.
4. A description of disposal methods, including information related to the disposal methods used. If more than one method is used, include the percentage disposed of by each method.
5. For landfill disposal include the name and location of the landfill and the order number of WDRs that regulate it.
6. For land application include the location of the site and the order number of any WDRs that regulate it.
7. For incineration include the name and location of the site where incineration occurs, the order number of WDRs that regulate the incineration facility, the disposal method of ash, and the name and location of the ash-receiving facility, if applicable.
8. For composting include the location of the site and the order number of any WDRs that regulate it.

Wastewater Treatment Facility Information Summary

9. The results of an annual evaluation conducted pursuant to Standard Provision E.4, with a figure depicting monthly average discharge flow for the previous five (5) calendar years.
10. A summary and discussion of compliance with these WDRs for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and or planned to bring the discharge into full compliance with this Order.

11. The names, certificate grades, and general responsibilities of all persons in charge of wastewater treatment and disposal.
12. Names and telephone numbers of persons to contact regarding the WWTF for routine and emergency situations.
13. A statement certifying when each handheld monitoring instruments and devices were last calibrated, including identification of the person who performed the calibrations (per Standard Provision C.4).
14. A statement whether the current Operation and Maintenance Manual, Sampling Plan, and Contingency Plan reflect the WWTF as currently constructed and operated. Include the dates when these documents were last reviewed.
15. A brief discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the submitting Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the submitting Discharger or its authorized agent as described in the Section B.3 of the Standard Provisions.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region on <date> February 2020.

Ordered by: _____
PATRICK PULUPA, Executive Officer

GLOSSARY

µmhos/cm	Micro-mhos per centimeter, which is the same as micro-Siemens per centimeter (mS/cm)
Annually	Once per year
BOD_5	Five-day biochemical oxygen demand at 20°C
Daily	Every day except weekends or holidays
DO	Dissolved oxygen
EC	Electrical conductivity at 25°C
ft	feet
gpd	Gallons per day
MDL	method detection limit
mg/L	milligrams per liter
MGD	Million gallons per day
Monthly	Once per calendar month
Quarterly	Once per calendar quarter
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Weekly	Once per week